Title (en)

SYSTEMS AND METHODS FOR MITIGATING LATENCY IN A DATA DETECTOR FEEDBACK LOOP

Title (de)

SYSTEME UND VERFAHREN ZUR MINDERUNG DER LATENZ IN EINER DATENDETEKTOR-RÜCKKOPPLUNGSSCHLEIFE

Title (fr)

SYSTÈMES ET PROCÉDÉS POUR ATTÉNUER LE RETARD AFFECTANT UNE BOUCLE DE RÉTROACTION DE DÉTECTEUR DE DONNÉES

Publication

EP 2191569 B1 20181121 (EN)

Application

EP 08755873 A 20080519

Priority

US 2008064121 W 20080519

Abstract (en)

[origin: WO2009142620A1] Various embodiments of the present invention provide systems and methods for mitigating latency in a data detector feedback loop. For example, a method for reducing latency in an error corrected data retrieval system is disclosed. The method includes performing an analog to digital conversion at a sampling instant to create a digital sample, and performing a data detection on the digital sample to create a detected output. The detected output is compared with the digital sample to determine a phase error. During an interim period, the digital sample is adjusted to reflect the phase error to create an adjusted digital sample. After the interim period, the sampling instant is adjusted to reflect the phase error.

IPC 8 full level

G11B 20/10 (2006.01); **H03L 7/07** (2006.01); **H03L 7/08** (2006.01); **H03L 7/081** (2006.01); **H03L 7/091** (2006.01); H04L 7/033 (2006.01)

CPC (source: EP US)

G11B 20/10009 (2013.01 - EP US); **G11B 20/10037** (2013.01 - EP US); **G11B 20/10046** (2013.01 - EP US); **G11B 20/10222** (2013.01 - EP US); **H03L 7/07** (2013.01 - EP US); **H03L 7/0807** (2013.01 - EP US); **H03L 7/0814** (2013.01 - EP US); **H03L 7/0816** (2013.01 - EP US); **H03L 7/091** (2013.01 - EP US); G11B 2220/2516 (2013.01 - EP US); H04L 7/033 (2013.01 - EP US)

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MT NL NO PL PT RO SE SI SK TR

DOCDB simple family (publication)

WO 2009142620 A1 20091126; CN 101743690 A 20100616; CN 101743690 B 20140528; EP 2191569 A1 20100602; EP 2191569 A4 20140521; EP 2191569 B1 20181121; JP 2011523277 A 20110804; JP 5173021 B2 20130327; KR 101460835 B1 20141111; KR 20110021701 A 20110304; TW 200949703 A 20091201; TW I501157 B 20150921; US 2010164764 A1 20100701; US 8018360 B2 20110913

DOCDB simple family (application)

US 2008064121 W 20080519; CN 200880024683 A 20080519; EP 08755873 A 20080519; JP 2011510468 A 20080519; KR 20107002747 A 20080519; TW 97129670 A 20080805; US 66331908 A 20080519